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EXAMINER

KUMAR, PANKAJ

ART UNIT

PAPER NUMBER

2631

DATE MAILED: 07/11/2003

2

Please find below and/or attached an Office communication concerning this application or proceeding.

177

## Office Action Summary

Application No.

09/181,253

Applicant(s)

KAROL, GREGORY MICHAEL

Examiner

Pankaj Kumar

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 6/20/2003 have been fully considered but they are not persuasive.

2. As per the argument for claim 15, applicant argues that the PLL circuit and detection circuit are claimed distinctly and hence the reference does not meet the limitation. The office respectfully traverses this argument since the claim does not state that the detection circuit cannot be inside the PLL circuit. In the reference, the PLL is divided into distinct components and the detection circuit is one of the distinct components that is inside the PLL circuit and hence meets the limitations of the claim. Also, it has been held that rearranging parts of an invention (in this case, rearranging the detection circuit and PLL) involves only routine skill in the art. In re Japikse, 86 USPQ 70. Also, it has been held that mere duplication of the essential working parts of a device (in this case, duplicating the detection portion of the PLL outside of the PLL) involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8. Also, it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. Nerwin v. Erlichman, 168 USPQ 177, 179.

3. As per claims 1-14, the alterations required include rearranging parts of an invention that may involve removing parts of an invention. It has been held that removing parts of an invention requires routine skill in the art. Applicant argues that there is no motivation. The office respectfully traverses this argument. Parts of the invention were simply rearranged and case laws are the motivation to reject. It has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. Rearranging may also involve omitting

Art Unit: 2631

and reversing. Accordingly, it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. In *re Karlson*, 136 USPQ 184. Also, it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In *re Einstein*, 8 USPQ 167. Hence there is motivation, there is a reasonable expectation of success in rearranging parts of the invention and the reference teaches via the combination of the claimed limitations as explained in the prior actions. Hence the office has established the prima facie case of obviousness under 35 USC 103a.

4. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

5. Obviousness is a question of law on series of factual determinations, including the scope and the content of prior art, differences between the art and the claims at issue and the level of ordinary skill in the art (*General Instrument Corporation v. International Trade Commission*, 20 USPQ2d 203).

6. The specification is not the measure of the invention. Therefore, limitations contained therein cannot be read into the claims (and in this case imply, as the applicant has done in the arguments, that the claims are very different from the reference) for the purpose of avoiding the

Art Unit: 2631

prior art (In re Sporck, 155 USPQ 687). The claims are given their broadest possible reasonable interpretation.

7. As per claim 16, applicant argues that the data in the reference is not equivalent to applicant's claimed clock. The office respectfully traverses this argument. Data can be considered to be a clock. Also, it has been held to be within the general skill of a worker in the art to select a known material (in this case, the data) on the basis of its suitability for the intended use (in this case, a clock) as a matter of obvious design choice. In re Leshin, 125 USPQ 416. Also, anticipatory reference need not duplicate, word for word, what is in claims; anticipation can occur when claimed limitation is "inherent" or otherwise implicit in relevant reference (Standard Havens Products Incorporated v. Gencor Industries Incorporated, 21 USPQ2d 1321). Also, the claim has functional language which is related to a matter of use. In any event, the language is insufficient to define over the prior art.

8. Also, Richards says in paragraph 21: "The clock signal is generated by the microprocessor 210 of the installation and is used system-wide. Thus, it should be understood that the clock signal is available to every one of the block components shown in FIG. 4, including the TACTS demodulator 402 and the HDR demodulator 404." Figure 12 is the demodulator of fig. 4.

### ***Response to Amendment***

### ***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2631

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Fazakerly et al.

USPN 4208635. See prior action(s) and response to arguments for details.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bedrosian

USPN 5,740,211. See prior action(s) and response to arguments for details.

13. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being anticipated by Richards et al.

USPN 6178207.

14. As per claim 16, Richards teaches a method for controlling a clocking circuit including a clock source comprising: detecting a failure of said clock source, the clock source coupled to an input of a phase-locked loop ("PLL") circuit; applying a control signal to said PLL in response to said failure of said clock source, said control signal altering a time constant within said PLL.

(Richards teaches clock source, input, PLL, coupling, etc. within figures 4 and 12 when Richards says in paragraph 21: "The clock signal is generated by the microprocessor 210 of the

Art Unit: 2631

installation and is used system-wide. Thus, it should be understood that the clock signal is available to every one of the block components shown in FIG. 4, including the TACTS demodulator 402 and the HDR demodulator 404.” Figure 12 is the demodulator of fig. 4.

However, Richards might not explicitly show the clock going to the PLL. It would have been obvious to one skilled in the art at the time of the invention to modify Richards to show the clock going to the PLL. One would be motivated to do so since a phase of a signal is dependent on the time and a clock provides time. Thus, in order for the PLL to function properly, one would want to feed the clock to the PLL components. Also, it has been held that rearranging parts of an invention requires routine skill in the art.) (Richards paragraphs 59 and 63: “The gain starts at one for the first transition of a message, and drops as each additional bit change occurs following a  $1/(N+1)$  sequence, where N is the number of transitions since the start of the message. To accommodate clock drift during long stretches without data transitions, the gain increases with each bit period (with or without a data transition) by a factor of  $2^{\sup.-m} (1-G)$ , where m is the user determined factor that sets the time constant J of the filter and G is the instantaneous tracking loop gain ... If the time constant J of the filter circuit 1208 is zero ( $m=0$ ), then the circuit takes the new clock transition value as the new clock signal timing (that is, the correction factor is 100%). Therefore, in the case of  $J=0$ , it doesn't matter how recently the most recent transition (and therefore clock information) was received, the new transition is taken as valid and the clock out signal is fixed to the new transition. Those skilled in the art will recognize that this operation is different from that of a conventional phase lock loop, which takes some fixed portion of old and new data to set a new frequency. In this way, the clock recovery circuit 1208 of the invention provides an adaptive PLL.”)

Art Unit: 2631

15. As per claim 17, Richards teaches the method of claim 16, wherein said altering said time constant includes modifying a feedback loop (Richards fig. 12: within PLL output of  $Z^{-1}$  including 1216, 1218, 1220, 1222, and DPLL indicated inside 1208) within said PLL by way of said control signal (see quote above in Richards).

16. As per claim 18, Richards teaches the method of claim 17, wherein said altering comprises at least one of engaging and disengaging (Richards fig. 12: in PLL, wipe-off registers A&B occurs send control signals to mux at certain points which effectively engages or disengages the mux) at least one circuit element into said feedback loop in response to said control signal.

17. As per claim 19, Richards teaches the method of claim 16, further comprising switching another clock source to said input of said PLL in response to said control signal. (Richards fig. 12: within 1208, the bit-sync control effectively switches another clock source in order to synchronize. Bit-synch control is receiving a control signal from the bottom)

18. As per claim 20, Richards teaches the method of claim 19, wherein said switching to said other clock source includes switching from a bus received clock source to a local clock source (Richards fig. 12: bit sync control is looking to see if a bit is not in sync (i.e. the bit is affected by another clock) then it will change the bit synchronization via its locally determined synchronization which inherently uses its local clock since that is the only clock the bit synchronizer has.).



***Conclusion***

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

20. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (703) 305-0194. The examiner can normally be reached on Mon, Tues, Thurs, Fri after 8AM to after 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (703) 305-4378. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

PK  
July 10, 2003

TEMESGHEN GHEBREYESAE  
PRIMARY EXAMINER